

DOCUMENT RESUME

ED 310 641

FL 018 153

AUTHOR Dalle, Teresa S.; Inglis, Margaret J.
TITLE What Really Affects Undergraduates' Evaluations of Nonnative Teaching Assistant's Teaching?
PUB DATE 11 Mar 89
NOTE 17p.; Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages (23rd, San Antonio, TX, March 7-11, 1989).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classroom Communication; English (Second Language); Evaluation Criteria; Faculty Evaluation; *Foreign Nationals; Higher Education; *Language Proficiency; Language Tests; Measures (Individuals); Questionnaires; Speech Skills; *Student Attitudes; *Student Evaluation of Teacher Performance; *Teaching Assistants; Test Reliability; Videotape Recordings
IDENTIFIERS *Memphis State University TN

ABSTRACT

In a study of the reliability of an English language proficiency test for non-native teaching assistants (NNS TAs), 18 NNS TAs were administered the SPEAK Test. The results were compared with student evaluations of the intelligibility and clarity of the TAs' classroom speech. Despite problems with the SPEAK Test, the measure was considered a valuable primary screening device. Several of the highest-scoring TAs on the SPEAK Test were not rated highly by students, suggesting the possibility of other variables affecting student evaluations. A questionnaire was administered to the students for evaluation of the TAs' communication style, and the students also completed the usual faculty evaluation form. The subconstruct "attentiveness" on the communicator style measure was the only variable showing a high degree of correlation with assessments of teacher performance. Videotapes of the TAs in a mock teaching situation were used to further examine the attentiveness factor in the classroom performance of three of the NNS TAs. It is suggested that teacher attentiveness can compensate for deficiency in English speech skills. The undergraduate student questionnaire is appended. (MSE)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED310641

WHAT REALLY AFFECTS UNDERGRADUATES' EVALUATIONS
OF NONNATIVE TEACHING ASSISTANT'S TEACHING?

Presented on March 11, 1989
San Antonio, Texas
International TESOL Conference

by

Teresa S. Dalle, Ph.D.
Margaret J. Inglis, Ed.D.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

R. Tobias

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

F7018153

In the spring of 1987, a committee was formed at Memphis State University to evaluate the need for special testing and training for non-native speaking teaching assistants (NNS TAs). As the result of this committee's concerns, a research study was conducted in the spring of 1988. The study had two objectives-- the reliability of the SPEAK Test for predicting the NNS TAs' English speaking performance in the classroom (committee members were divided concerning its use), and the emphasis that should be given to linguistic training if a special NNS TA training program were to be established.

The first concern of the research, therefore, was to establish the relationship between SPEAK scores and student-rated speech evaluation scores. The SPEAK test had never been given at Memphis State University. The nineteen NNS TAs who were teaching classes (not directing lab sessions) during the spring semester of 1988 were invited to participate. Eighteen agreed to be tested and to have their classroom performance evaluated by their students.

The SPEAK test had to be conducted in two sittings because of scheduling conflicts, but all the NNS TAs of any one national origin were tested together to reduce the likelihood of information being passed from the first group to the second. The NNS TAs came from the following countries: five from India, three from Taiwan, two from Iran, two from Korea, and one each from The People's Republic of China, Egypt, France, Lebanon, Malaysia, and Cameroon. The audio-cassettes were sent to Educational Testing Services for rating. The comprehensive score

was used as the comparative measure for statistical analysis. A perfect score was 300.

To measure the undergraduate students' evaluation of the NNS TAs' English speaking ability a scale, termed the Speech Evaluation (SE) scale, was adapted from John Orth (1982). This scale sought to evaluate the intelligibility and clarity of the NNS TAs' speech. Each of the items was computed by asking the respondents to indicate their agreement or disagreement with a statement about their NNS TA's speech. The five choices were "strongly agree, agree, neutral, disagree, or strongly disagree". There were eight scored items and six unscored items that were added as filler items to avoid response set. The item-total correlations ranged from 0.57 to 0.77. All scored items contributed to the scale's reliability. A composite score was computed by combining scores on the eight scored items and a perfect score was 40. In computing the scores, three of the scores had to be reversed and the neutral scores were eliminated. (See Appendix 1).

The relationship between the two sets of scores was tested by using correlational analysis. The comprehensive ratings that the NNS TA received on the SPEAK test were compared to the mean ratings of the NNS TAs on the speech evaluation scale. A Pearson's r Product Moment Correlation Coefficient was calculated. The correlation between these two variables was 0.6141 ($p < .001$), indicating a moderate positive correlation.

The SPEAK test did produce a varying degree of anxiety among the NNS TAs. Some of the NNS TAs expressed very negative

attitudes towards the test, and some technical problems did occur. Although the test did predict the top quarter and the bottom quarter of the sample very accurately, the grey area in this sample appeared to range from 180 to 260. However, given the problems that an institution like Memphis State has with funding and release time for their very limited number of qualified personnel, the test would have to be regarded as a valuable primary screening device.

It is interesting to compare the Speech Evaluation scores of three NNS TAs who scored 260 on the SPEAK test. Their ratings among the NNS TA sample for the Speech Evaluation scale were 11th (26.65), 13th (23.82) and 18th (20.99) highest. Why would the speech of the three NNS TAs be viewed so differently by their undergraduate students? What variables intervene to affect the way an undergraduate class evaluates a NNS TA?

This discrepancy between objective evaluations of NNS TAs' speech and student generated evaluations has been noted in the literature by Orth (1982) and Bailey (1982). In both cases the researchers surmised that some variable or variables intervene to affect the undergraduates' evaluations. To take this assumption one step further, Bailey attempted to determine whether something more than the NNS TAs' English speaking ability affects their overall evaluations as an effective teacher.

Bailey (1982) used a coding scheme to determine what communication moves were positively related to a high teaching evaluation. What she discovered was that bonding (any act that helps the TA establish a bond, such as apologizing or use of

humor) and eliciting (any act where the TA invites comments or questions) were positively related for native speaking TAs, and inform moves (any act where information is given) were negatively related for non-native speaking TAs.

Bailey (1982) then developed typologies of TAs who had varying degrees of acceptance by their undergraduate students. The least successful TAs had little interaction with their students and were termed either Active Unintelligibles or Mechanical Problem Solvers. However, the three remaining groups (Knowledgeable Helpers/Casual Friends, Entertaining Allies, and Inspiring Cheerleaders) displayed characteristics that made them effective teachers according to their student-rated evaluations. What distinguished these latter three typologies were their friendliness, their relaxed styles, their degree of involvement with their students, their liveliness, and their ability to play to their students as to an audience.

The Memphis State research attempted to tap these same characteristics but in a different way. Using a questionnaire, the Communicator Style Measure, developed by R. Norton (1977) for the field of instructional communication, the undergraduate students were asked to evaluate the communicator style of their NNS TAs. From 11 subconstructs 5 were chosen that best approximated the characteristics exhibited by Bailey's (1982) top three typologies: friendly, relaxed, attentive, animated, and dramatic.

The Communicator Style Measure questionnaires were distributed at the same time as the Speech Evaluation scale

(Orth, 1982), toward the end of the semester when the undergraduates had become sufficiently familiar with the NNS TAs' speech and communicator style. The variables were computed by asking the undergraduates to indicate their agreement or disagreement with a statement about the NNS TA's communicator style on a five point scale of "strongly agree, agree, neutral, disagree, strongly disagree." Norton reports reliabilities for the communicator style item measures utilized in this study as follows: friendly (.37), animated (.56), attentive (.57), dramatic (.68), and relaxed (.71). There were four scored items for each variable and only these items were included. The order was mixed to counter response set. Two item scores were reversed. Each composite score was computed by combining the four scored items and a perfect score was 20. (See Appendix 2).

To evaluate the NNS TA's effectiveness as a teacher the undergraduates participated in the regular faculty evaluation process using the SIRS instrument presently in use at Memphis State University. This form was adapted by Arreola (1973) from the Michigan State University SIRS evaluation form developed by Centra in 1969. This measure constituted the dependent variable for the research analysis.

Two factors normally included in this evaluation form--course demands and course organization--were excluded from the analysis because TAs do not have control over these factors. Internal consistency and reliability for the three remaining factors are as follows:

1. Instructor Involvement	.81
2. Student Interest	.79
3. Student-Instructor Interaction	.84

The variables were computed by asking the undergraduates to respond to statements about the NNS TA's teaching by indicating their agreement or disagreement on a five-point scale (strongly agree, agree, neutral, disagree, strongly disagree). There were four scored items for each of the above measures. Two single item statements to evaluate teaching competence and teaching effectiveness were also included in the analysis. A single composite score was computed by combining the four measures and the two single item responses and a perfect score was 90.

A stepwise multiple regression was computed using six independent variables--the five communicator style subconstructs and the speech evaluation score--and the teaching evaluation measure (SIRS) as the dependent variable. The teacher's performance within a class was used as the unit of analysis.

The subconstruct attentive was the only variable to enter the equation. It was highly significant with a correlation of 0.85 ($p < .001$) and it explained 73 percent of the variance. No further variables were entered into the equation because the remaining five variables had nonsignificant t values and would therefore not add to the predictive value of the equation.

Norton (1983) describes attentive as signaling an ongoing willingness to provide feedback that the person's messages are being processed in an alert and/or understanding manner. This description clearly would embrace the bonding and eliciting that Bailey (1982) found to be positively related to effective teaching.

There were three NNS TAs in the study whose demonstration of, or lack of, attentiveness was particularly significant. Videotapes were made of these three NNS TAs to see if the NNS TAs would demonstrate attentiveness in a mock teaching situation. All three of these NNS TAs were invited to present a ten minute lecture on any topic that they were comfortable with to a master's level TESOL assessments class. This class was chosen in order to keep the choice of NNS TAs and the video-taping confidential. Interestingly, communicator style preference was evident in the mock teaching presentation.

The first NNS TA, from India, scored 270 on the SPEAK test, was given the highest score in the sample on the student-rated speech evaluation (32.43 out of 40), had the third highest attentiveness rating (15.33 out of 20), and the highest teaching evaluation (75.65 out of 90). He taught mathematics.

The videotape demonstrated that he made excellent use of inclusive pronouns to build a sense of commonality in the classroom. Though his speech was deliberate at times, he spoke clearly, reinforcing what he was writing on the board, and elaborating effectively at key juncture points in the problem. His game (demonstrated in the videotape) was designed to build confidence among the students, and he acted as a cheerleader extolling the students to enjoy the game and assuring them of how easy mathematics really is.

The second NNS TA, from the Republic of China, Taiwan, had spoken English for the shortest period of time among the NNS TAs. She scored 230 on the SPEAK test and her student-rated speech

evaluation was in the middle range of the sample (27.27 out of 40). She shared with another NNS TA the highest rating in attentiveness (15.42 out of 20), and received the second highest teaching evaluation (74.59 out of 90). She also taught mathematics.

This NNS TA, more than any other, demonstrated how effectively an attentive attitude compensates for poor English speaking skills. She honestly admitted her nervousness, showed respect for others' opinions and asked the students to play with a math formula that was individualized, making everyone feel important and involved. She also used inclusive pronouns and gestures to build commonality in the classroom.

The third NNS TA, from Cameroon, scored 260 on the SPEAK test, but received the lowest score in the sample on the student-rated speech evaluation (20.99 out of 40). He had the lowest attentiveness rating (11.93 out of 20), and the lowest teaching evaluation (53.00 out of 90). He taught accounting.

This NNS TA lectured throughout his presentation exactly as he did in the two minute segment on videotape, following a well-organized, pre-arranged lesson plan. There was no interaction with the students and little board work. Therefore, the students had no opportunity to see any words he was mispronouncing. He moved very little from behind the desk and his humor was directed at the students rather than shared with them.

It was interesting that the two highly attentive NNS TAs both chose to accommodate their audience's non-math background by

introducing a game that would simplify mathematics for the students and create a relaxed atmosphere for learning. They both expressed their enthusiasm for their chosen discipline but allowed that their undergraduate students usually did not share this enthusiasm and that they understood that others had a right to different opinions. Based upon this honest recognition of differing attitudes they set out to win over what they expected were reluctant mathematicians. The TESOL students asked questions and became so involved in the presentations that both original versions of the videotapes ran about 30 minutes. There was a lot of the Entertaining Ally and Inspiring Cheerleader (Bailey, 1982) in both these presentations.

The third NNS TA, on the other hand, never attempted to accommodate his audience. He shared with the class his general disdain for undergraduate accounting students and indicated that his role was to show them how poorly high school bookkeeping had prepared them for college level accounting. His attitude toward his discipline was equally negative. There was no interaction with the class.

Although this research is limited by its size--only 18 NNS TAs participated--and its single location--Mid-South undergraduates may be unique in the value they place on a high degree of support and therefore on an attentive style from their TAs--it does raise some issues that deserve further study. It suggests that poor English speaking skills can be compensated for by expressing an attentive style of communication. It reinforces earlier research findings (Orth, 1982, Bailey, 1982) that speech

alone cannot predict effective teaching performance in the classroom. Furthermore, it raises questions about the current method of choosing TAs that emphasizes their academic ability rather than their interpersonal skills.

References

- Arreola, R. A. (1973). A cross-institutional factor structure replication of the Michigan State University SIRS faculty evaluation model. College Student Journal, 7, 38-42.
- Bailey, K. M. (1982). Teaching in a second language: The communicative competence of non-native speaking assistants. Dissertation Abstracts International, 43, 3305A. (University Microfilm No. 83-06, 009)
- Norton, R. W. (1977). Teacher effectiveness as a function of communicator style. In B. Rubin (Ed.), Communication Yearbook I. (pp. 525-542). New Brunswick: Transactional-International Communication Association.
- Norton, R. W. (1983). Communicator style--theory, applications, and measures. Beverly Hills: Sage Publications.
- Orth, J. L. (1982). University undergraduate evaluational reactions to the speech of foreign teaching assistants. Dissertation Abstracts International, 43, 3897A. (University Microfilms No. 83-09, 183)

Appendix 1 - Speech Evaluation Scale - copyright John Orth, 1982

Undergraduate Questionnaire 2 - SZ-Scale

The following statements express opinions that students might have about an instructor. There are no right or wrong answers. Many students might agree with each statement and many others might disagree. We are interested in your honest feeling about whether each statement applies to your instructor in this class. Please work quickly but neatly. Do not spend too much time thinking about each statement, but give your first reaction, marking it on this sheet using the following scale.

YES! = STRONGLY AGREE
 yes = AGREE
 ? = NEUTRAL or UNDECIDED
 no = DISAGREE
 NO! = STRONGLY DISAGREE

-
1. I have to listen very closely to understand what the instructor says.
 YES! yes ? no NO!
 2. The instructor is able to communicate clearly and effectively in English.
 YES! yes ? no NO!
 3. I find it hard to concentrate on what the instructor says because of the way s/he speaks.
 YES! yes ? no NO!
 4. The instructor speaks clearly and is easy to understand.
 YES! yes ? no NO!
 5. Speaking English seems to be difficult for the instructor.
 YES! yes ? no NO!
 6. I don't have any problems understanding the instructor.
 YES! yes ? no NO!
 7. The instructor sounds confident.
 YES! yes ? no NO!
 8. The instructor has difficulty expressing her/himself clearly and effectively in English.
 YES! yes ? no NO!

9. The instructor has a heavy foreign accent.
YES! yes 7 no NO!
10. The instructor's speech is annoying and distracting.
YES! yes 7 no NO!
11. I have difficulty understanding the instructor.
YES! yes 7 no NO!
12. The instructor's English speaking ability is limited.
YES! yes 7 no NO!
13. The instructor can barely make her/himself understood.
YES! yes 7 no NO!
14. The instructor sounds unsure of her/himself.
YES! yes 7 no NO!

Appendix 2 - Communicator Style Measure - Copyright Robert
Norton, 1977

Undergraduate Questionnaire 3 - Communicator Style Measure

The following statements express opinions regarding your instructor. We are interested in your honest reactions to each statement. Please work quickly but neatly, giving your first reaction, without spending too much time thinking about each statement. Mark your answers on this sheet using the following scale:

YES! = STRONGLY AGREE
yes = AGREE
? = NEUTRAL or UNDECIDED
no = DISAGREE
NO! = STRONGLY DISAGREE

-
1. S/he readily expresses admiration for others.
YES! yes ? no NO!
 2. To be friendly, s/he habitually acknowledges verbally other's contributions.
YES! yes ? no NO!
 3. S/he has some nervous mannerisms in her/his speech.
YES! yes ? no NO!
 4. S/he is a very relaxed communicator.
YES! yes ? no NO!
 5. S/he can always repeat back to a person exactly what was meant.
YES! yes ? no NO!
 6. The rhythm or flow of her/his speech is sometimes affected by her/his nervousness.
YES! yes ? no NO!
 7. Under pressure s/he comes across as a relaxed speaker.
YES! yes ? no NO!
 8. Her/his eyes reflect exactly what s/he is feeling when s/he communicates.
YES! yes ? no NO!

9. S/he dramatizes a lot.

YES! yes 7 no NO!

10. Usually, s/he deliberately reacts in such a way that people know that s/he is listening to them.

YES! yes 7 no NO!

11. Regularly s/he tells jokes, anecdotes and stories when s/he communicates.

YES! yes 7 no NO!

12. S/he tends to constantly gesture when s/he communicates.

YES! yes 7 no NO!

13. Often s/he physically and vocally acts out what s/he wants to communicate.

YES! yes 7 no NO!

14. S/he is always an extremely friendly communicator.

YES! yes 7 no NO!

15. S/he really likes to listen very carefully to people.

YES! yes 7 no NO!

16. S/he is very expressive nonverbally in social situations.

YES! yes 7 no NO!

17. Whenever s/he communicates, s/he tends to be very encouraging to people.

YES! yes 7 no NO!

18. S/he actively uses a lot of facial expressions when s/he communicates.

YES! yes 7 no NO!

19. S/he very frequently exaggerates to emphasize a point.

YES! yes 7 no NO!

20. S/he is an extremely attentive communicator.

YES! yes 7 no NO!

STUDENT-INSTRUCTIONAL RATING SYSTEM

INSTRUCTOR _____ DEPT. _____ COURSE NO. _____ SECTION _____

DIRECTIONS

THIS FORM ENABLES YOU TO RATE BOTH THE INSTRUCTOR AND THE COURSE ON SEVERAL CHARACTERISTICS. PLEASE RESPOND AS ACCURATELY AND HONESTLY AS YOU CAN. LEAVE BLANK ANY ITEM THAT DOES NOT APPLY. A FREE RESPONSE SECTION IS PROVIDED ON THE REVERSE SIDE.

USE A SOFT LEAD PENCIL TO RESPOND TO EACH ITEM ACCORDING TO KEY PRINTED AT RIGHT. DO NOT USE INK OR BALLPOINT PENS. MAKE HEAVY BLACK MARKS THAT FILL THE CIRCLE COMPLETELY. ERASE CLEANLY ANY ANSWER YOU WISH TO CHANGE.

SEMESTER (F) SP SU 19 _____

SA - If you **strongly agree** with the statement
A - If you **agree** with the statement
N - If you **neither agree nor disagree**
D - If you **disagree** with the statement
SD - If you **strongly disagree** with the statement

WRONG

1 SA ☒ N ☐ D ☐ SD

WRONG

2 SA ☐ A ☒ D ☐ SD

WRONG

3 SA ☐ A ☐ N ☒ D ☐ SD

RIGHT

4 SA ☐ A ☐ N ☐ D ☒ SD

- | | SA | A | N | D | SD |
|---|------------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| 1. The instructor was enthusiastic when presenting course material | 1. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 2. The instructor seemed to be interested in teaching | 2. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 3. The instructor's use of examples or personal experiences helped to get points across in class | 3. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 4. The instructor seemed to be concerned with whether the students learned the material | 4. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 5. You were interested in learning the course material | 5. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 6. You were generally attentive in class | 6. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 7. You felt this course challenged you intellectually | 7. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 8. You have become more competent in this area due to this course | 8. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 9. The instructor encouraged students to express opinions | 9. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 10. The instructor appeared receptive to new ideas and others' viewpoints | 10. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 11. The student had an opportunity to ask questions | 11. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 12. The instructor generally stimulated class discussion | 12. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 13. The instructor attempted to cover too much material | 13. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 14. The instructor generally presented the material too rapidly | 14. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 15. The homework assignments were too time consuming relative to their contribution to your understanding of the course material | 15. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 16. You generally found the coverage of topics in the assigned readings too difficult | 16. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 17. The instructor appeared to relate the course concepts in a systematic manner | 17. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 18. The course was well organized | 18. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 19. The course materials appeared to be presented in logical content units | 19. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 20. The direction of the course was adequately outlined | 20. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 21. This course made a significant contribution to your overall personal educational objectives | 21. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 22. What percentage of the course material covered do you feel you actually learned?
(a) more than 90% (b) about 80% (c) about 70% (d) about 60% (e) less than 60% | 22. ☐ | b ☐ | c ☐ | d ☐ | e ☐ |
| 23. The instructor adequately assessed how well students mastered the course objectives | 23. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 24. The stated course objectives were reflected in the exams | 24. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 25. The instructor appeared to be thoroughly competent in his area | 25. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |
| 26. In general, the instructor was an effective teacher | 26. SA ☐ | A ☐ | N ☐ | D ☐ | SD ☐ |

STUDENT BACKGROUND: Select the most appropriate alternative.

YES NO

- | | | |
|---|-----------------------------|---|
| 27. Do you have confidence that these ratings will be taken seriously? | 27. Y ☐ | N ☐ |
| 28. Was this form administered fairly and correctly? | 28. Y ☐ | N ☐ |
| 29. Was this a required course for you? | 29. Y ☐ | N ☐ |
| 30. Are you a major in the area in which this course is being taught? | 30. Y ☐ | N ☐ |
| 31. What grade do you expect to receive in this course? | 31. A ☐ | B ☐ C ☐ D ☐ F ☐ |
| 32. What is your overall GPA? (a) 2.2 or less (b) 2.3-2.5 (c) 2.6-2.9 (d) 3.0-3.3 (e) 3.4-4.0 | 32. a ☐ | b ☐ c ☐ d ☐ e ☐ |

OPTIONAL ITEMS: Items 1 through 30 below may be used to respond to items specified by the instructor.

- | | | | | | |
|---------------|----------------|----------------|----------------|----------------|----------------|
| 1 (A B C D E) | 6 (A B C D E) | 11 (A B C D E) | 16 (A B C D E) | 21 (A B C D E) | 26 (A B C D E) |
| 2 (A B C D E) | 7 (A B C D E) | 12 (A B C D E) | 17 (A B C D E) | 22 (A B C D E) | 27 (A B C D E) |
| 3 (A B C D E) | 8 (A B C D E) | 13 (A B C D E) | 18 (A B C D E) | 23 (A B C D E) | 28 (A B C D E) |
| 4 (A B C D E) | 9 (A B C D E) | 14 (A B C D E) | 19 (A B C D E) | 24 (A B C D E) | 29 (A B C D E) |
| 5 (A B C D E) | 10 (A B C D E) | 15 (A B C D E) | 20 (A B C D E) | 25 (A B C D E) | 30 (A B C D E) |

SEE REVERSE SIDE FOR FREE RESPONSE SECTION